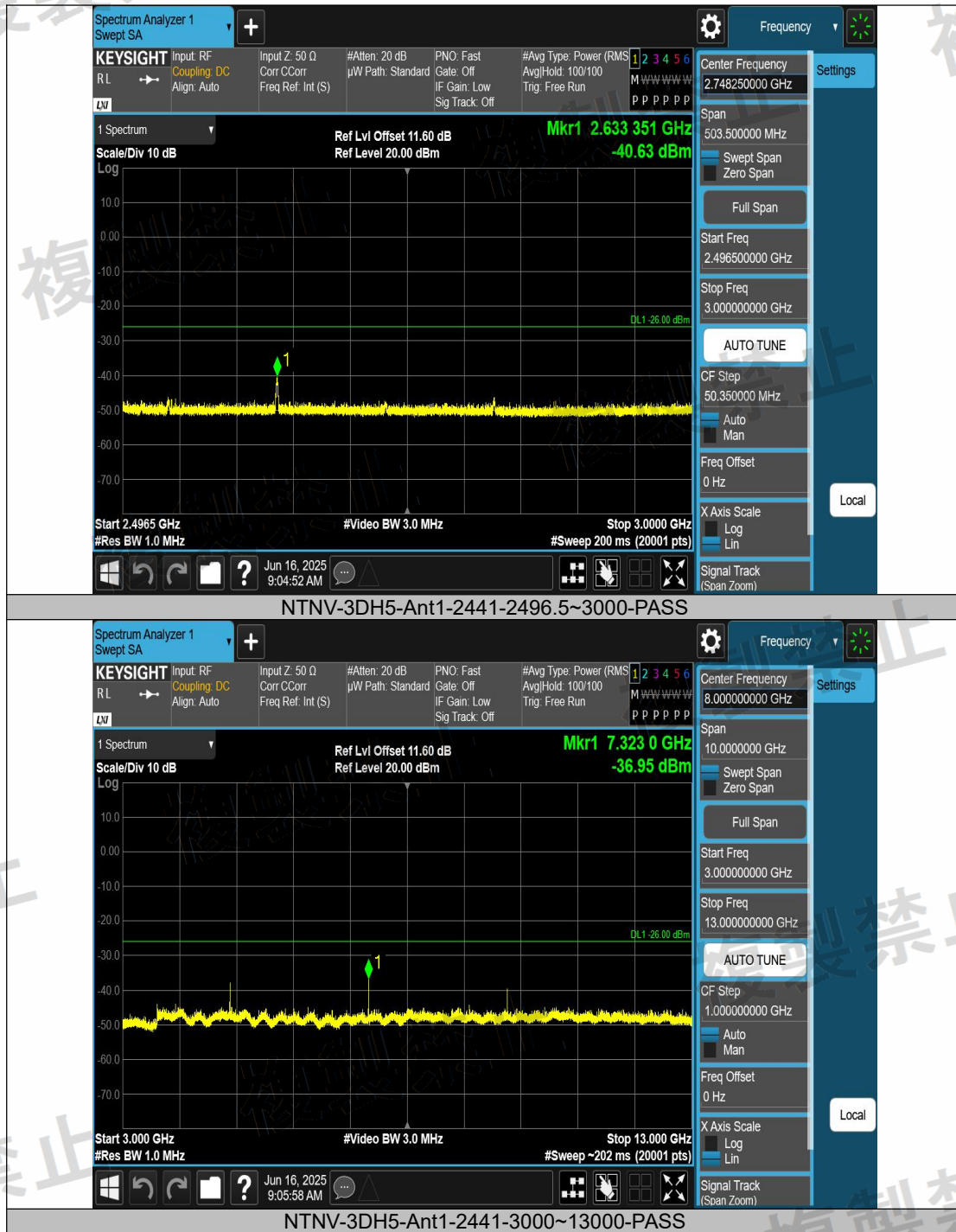
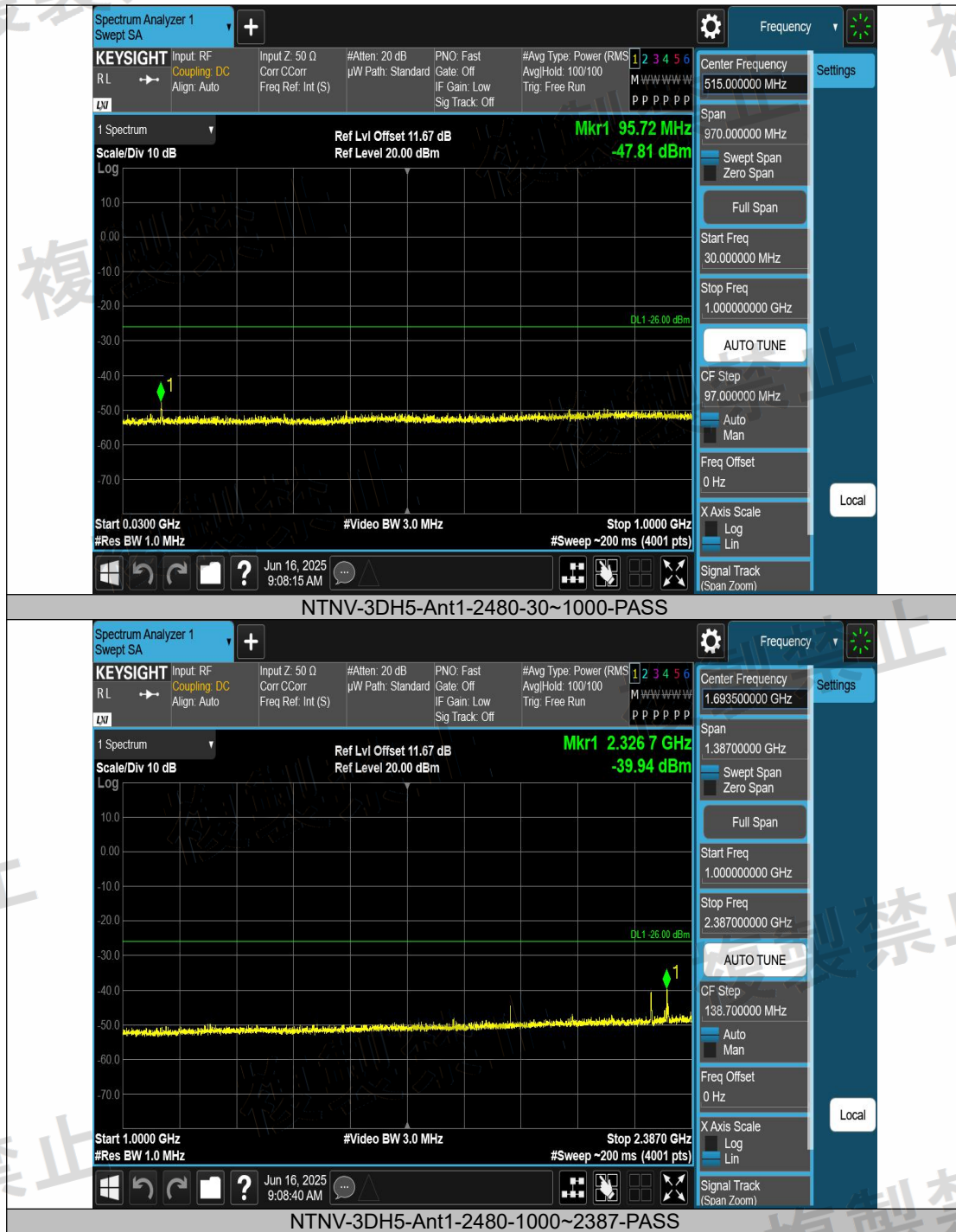
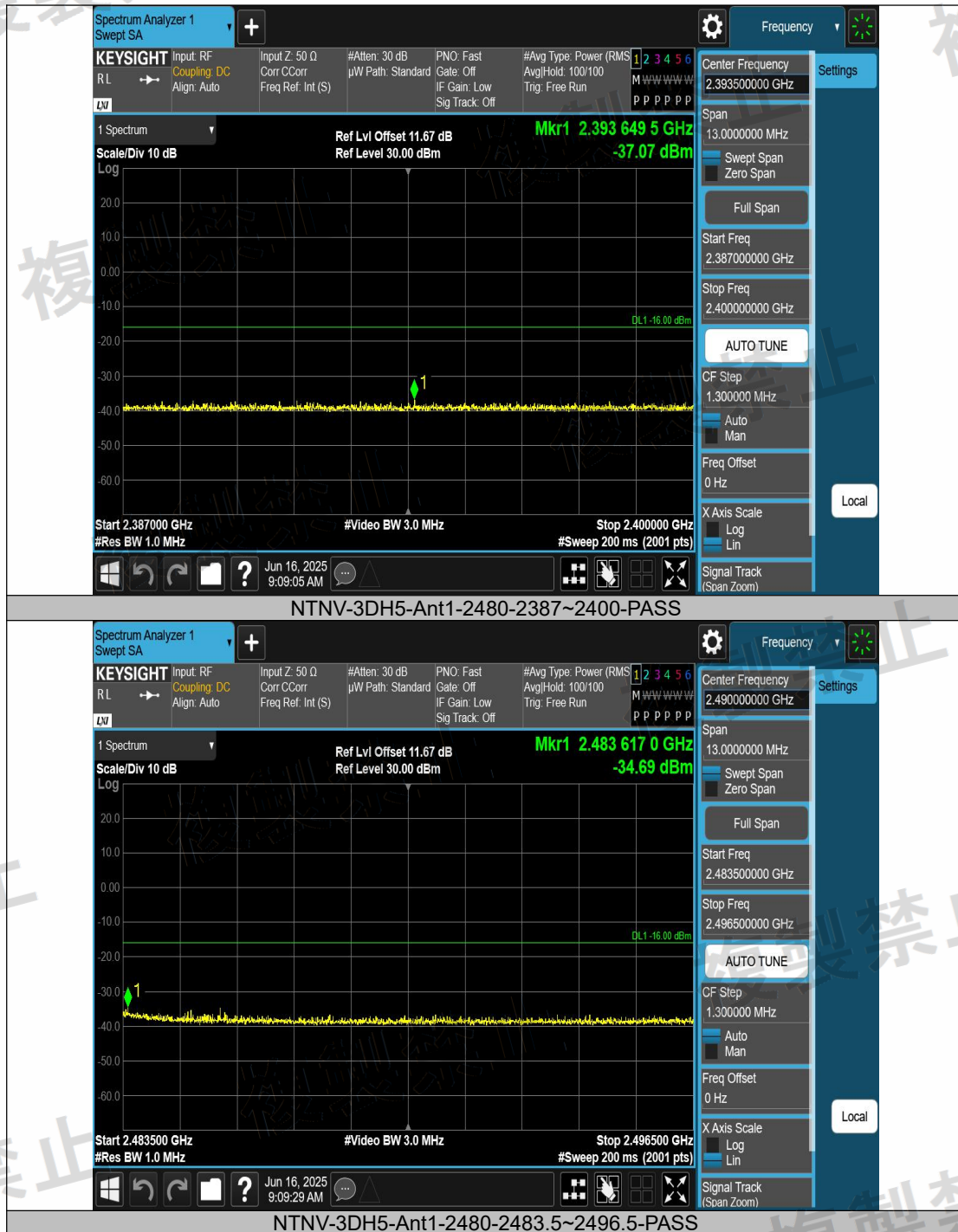
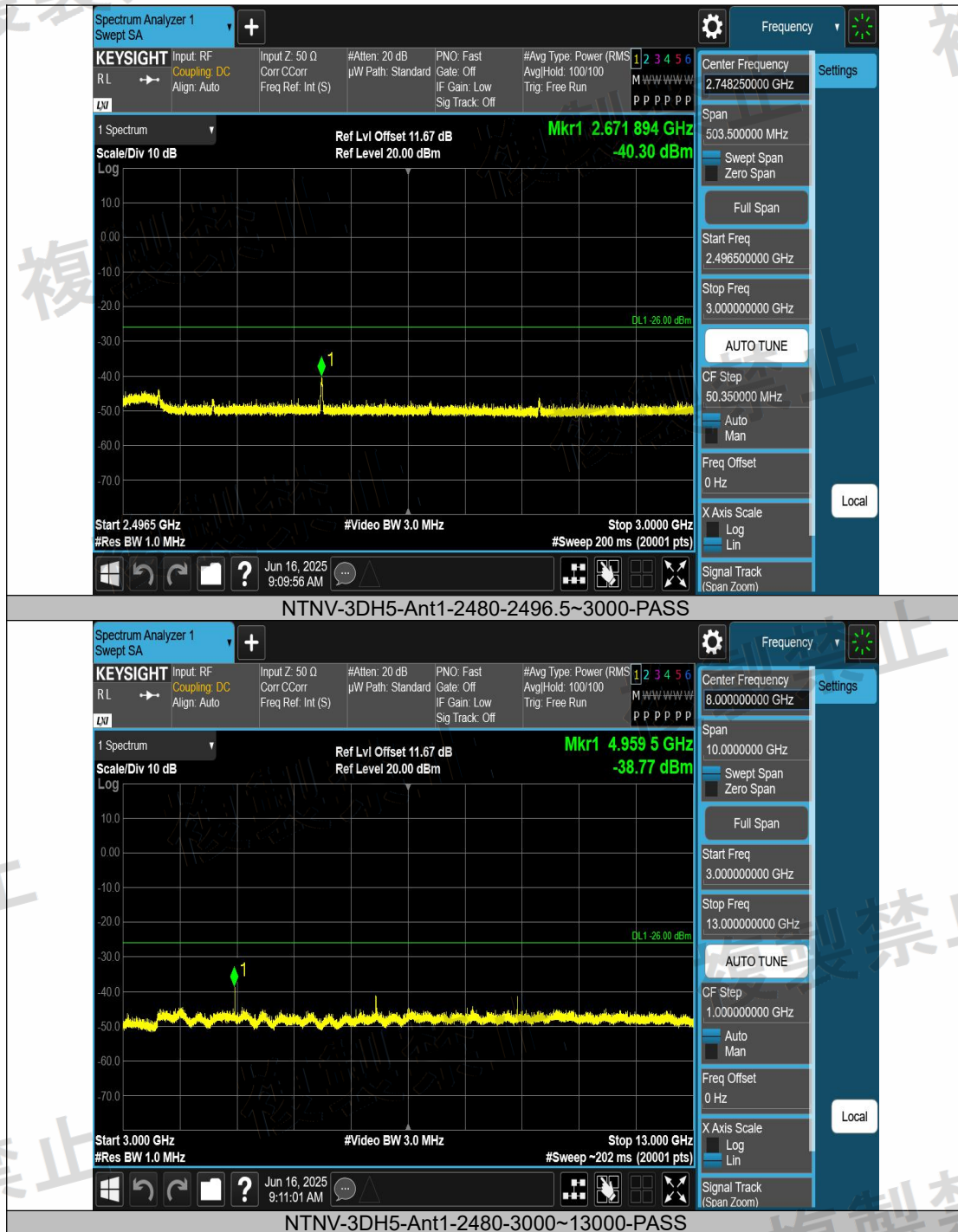
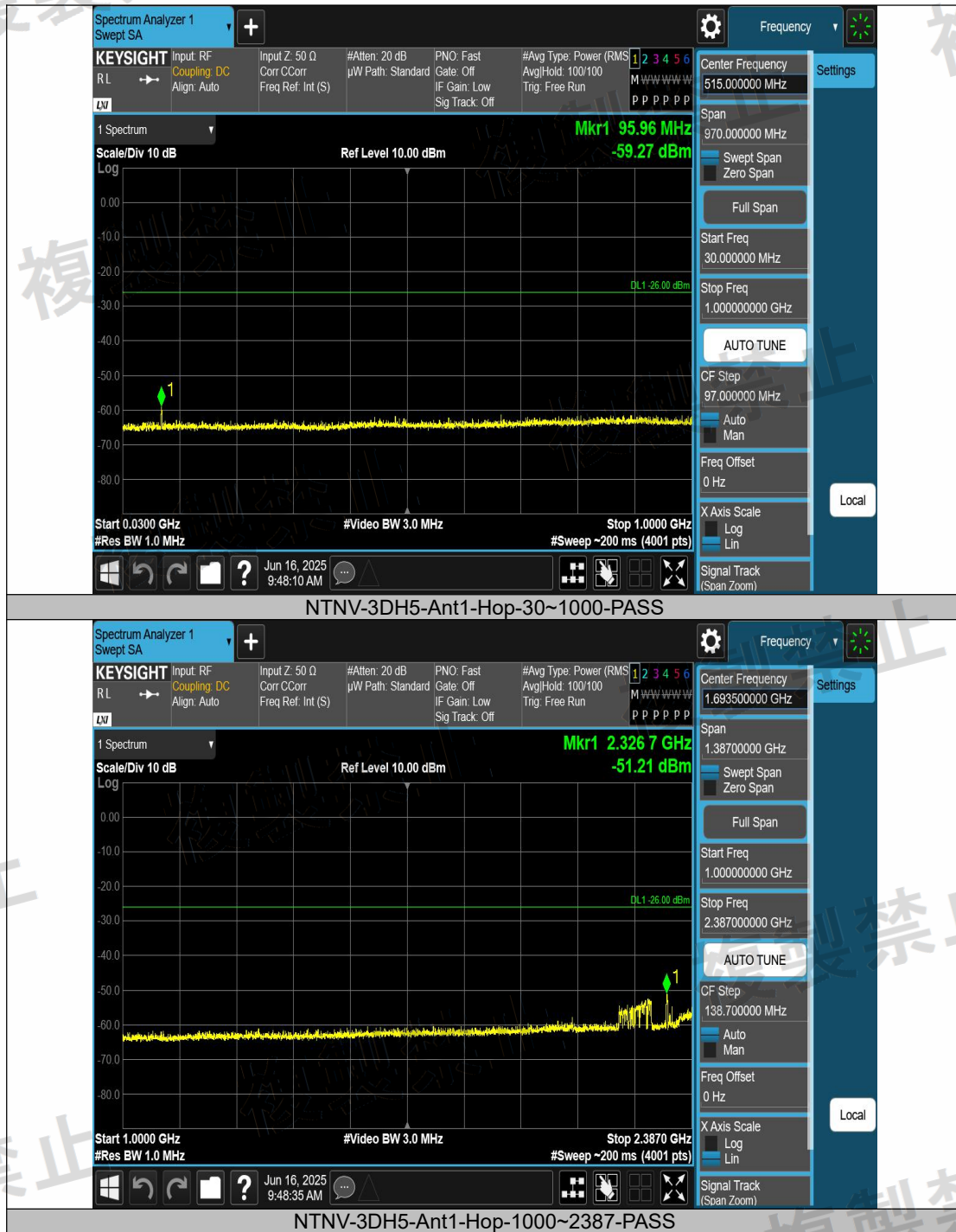


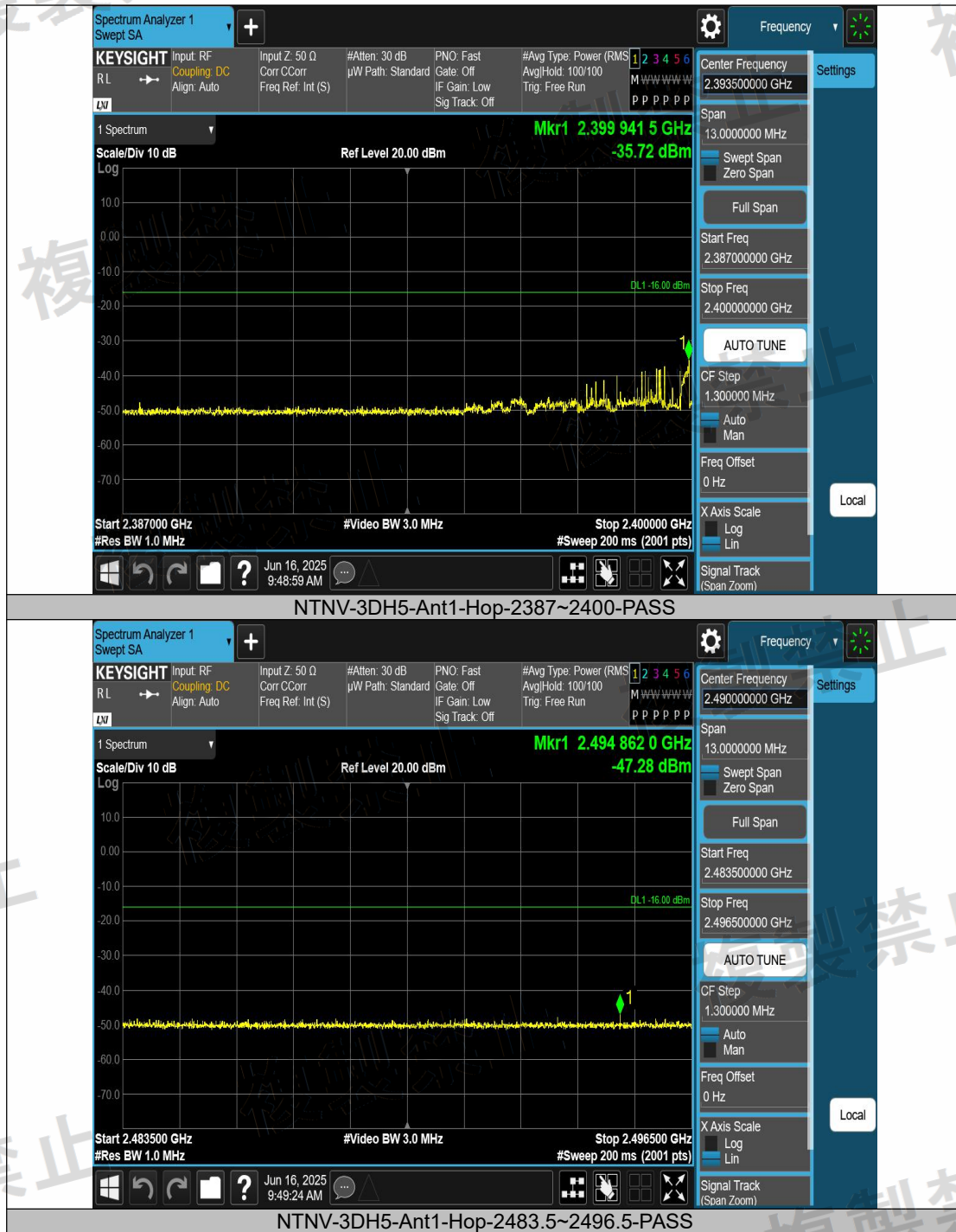


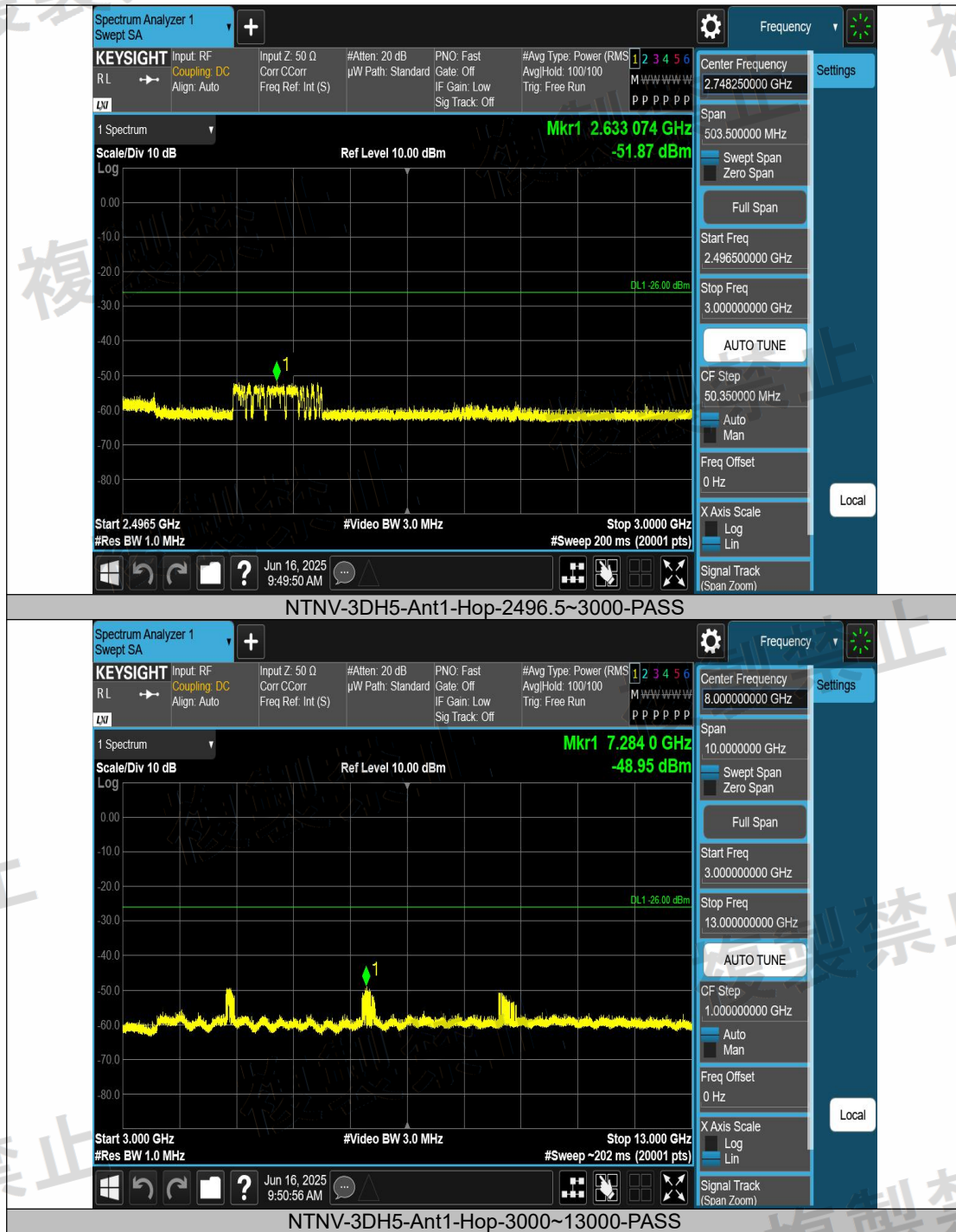












7.6 COLLATERAL EMISSIONS OF RECEIVER

7.6.1 Applicable Standard

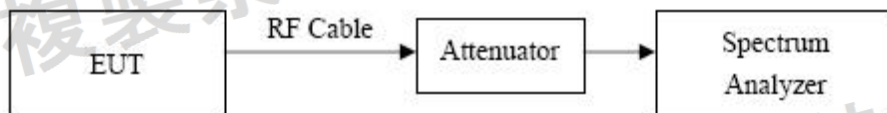
According to Item 19 of Article 2 Paragraph 1.

7.6.2 Conformance Limit

The limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4 nW (-54dBm) or less at a frequency below 1 GHz and 20 nW(-47dBm) or less at a frequency of 1 GHz or higher as measured using the circuit.

- | | |
|----------------------|-----------------------|
| a. 30 MHz - 1000 MHz | 4 nW (-54dBm) or less |
| b. 1GHz – 12.5 GHz | 20 nW(-47dBm) or less |

7.6.3 Test Setup Block Diagram



7.6.4 Test Procedure

Set the EUT so that the test frequency is can be measured receipt consecutively all the time.

(1) Set the attenuation value of the dummy load lowest as possible, due to low level of the measured object.

(2) Set Spectrum analyzer for seeking the collateral emission is set as below.

Sweeping Bandwidth	30MHz to 5 times of carrier frequency
Resolution Bandwidth	In case of frequency lower than 1 GHz, 100 kHz In case of frequency higher than 1 MHz
Video Bandwidth	Same level as the resolution bandwidth
Sweep Time	Minimum time to assure the measurement accuracy
Y-Axis Scale	10 dB/Div
Sweep Mode	Single sweep
Phase-Detection Mode	Positive peak

(3) Spectrum analyzer for measuring the collateral emission is set as below.

Central Frequency	Collateral emission frequency
Sweeping Bandwidth	0 Hz
Resolution Bandwidth	In case of frequency lower than 1 GHz, 100 kHz In case of frequency higher than 1 MHz
Video Bandwidth	Same level as the resolution bandwidth
Sweep Mode	Single sweep
Detection Mode	Sample

Set the spectrum analyzer as (2), seek the maximum amplitude of the collateral emission.

In case of sought result lower than 1/10 limit value, employ the sought value as the measured value.

In case the sought value exceeds 1/10 limit value, seek the collateral emission frequency by narrowing the sweeping band sequentially to 1/10 for the purpose of higher accuracy of the spectrum analyzer. Set the

spectrum analyzer as (3).

7.6.5 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

7.6.6 Test Results

All the modes were tested and recorded, the results of the test item are good.

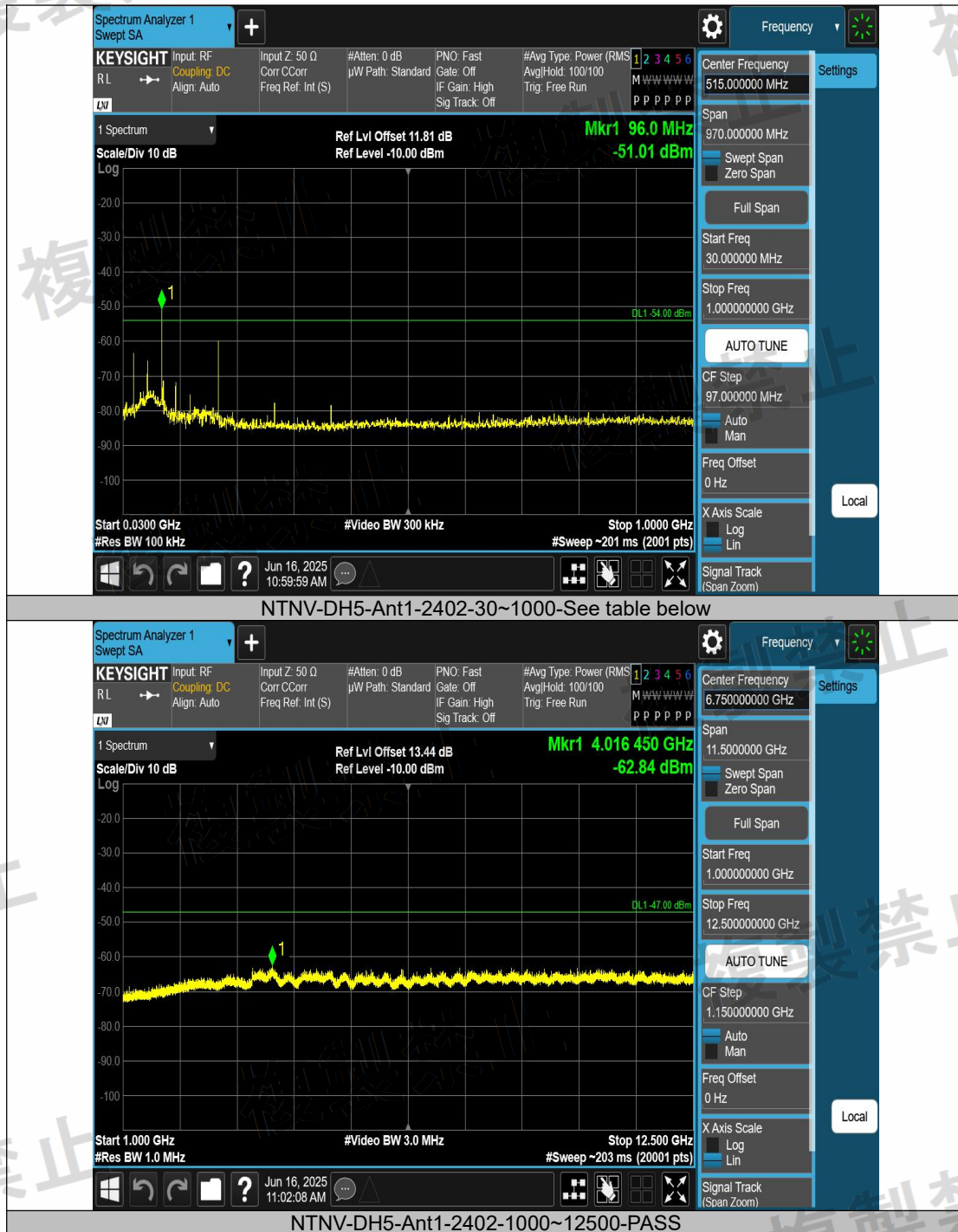
Test Condition	Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	Ant1	2402	30~1000	95.96	-51.01	≤-54	7.92501	≤4	See table below
NTNV	DH5	Ant1	2402	1000~12500	4016.45	-62.84	≤-47	0.52000	≤20	PASS
NTNV	DH5	Ant1	2441	30~1000	95.96	-51.55	≤-54	6.99842	≤4	See table below
NTNV	DH5	Ant1	2441	1000~12500	5097.45	-62.80	≤-47	0.52481	≤20	PASS
NTNV	DH5	Ant1	2480	30~1000	95.96	-50.83	≤-54	8.26038	≤4	See table below
NTNV	DH5	Ant1	2480	1000~12500	10590.43	-63.40	≤-47	0.45709	≤20	PASS
NTNV	DH5	Ant1	Hop	30~1000	95.96	-62.81	≤-54	0.52360	≤4	See table below
NTNV	DH5	Ant1	Hop	1000~12500	6287.70	-76.01	≤-47	0.02506	≤20	PASS
NTNV	2DH5	Ant1	2402	30~1000	95.96	-51.70	≤-54	6.76083	≤4	See table below
NTNV	2DH5	Ant1	2402	1000~12500	4073.95	-62.39	≤-47	0.57677	≤20	PASS
NTNV	2DH5	Ant1	2441	30~1000	95.96	-51.18	≤-54	7.62079	≤4	See table below
NTNV	2DH5	Ant1	2441	1000~12500	4029.68	-62.76	≤-47	0.52966	≤20	PASS
NTNV	2DH5	Ant1	2480	30~1000	47.95	-63.48	≤-54	0.44875	≤4	See table below
NTNV	2DH5	Ant1	2480	1000~12500	2322.5	-39.45	≤-47	113.50108	≤20	See table below
NTNV	2DH5	Ant1	Hop	30~1000	47.95	-74.72	≤-54	0.03373	≤4	PASS
NTNV	2DH5	Ant1	Hop	1000~12500	2410.48	-61.68	≤-47	0.67920	≤20	PASS
NTNV	3DH5	Ant1	2402	30~1000	47.95	-63.26	≤-54	0.47206	≤4	See table below
NTNV	3DH5	Ant1	2402	1000~12500	2587.58	-38.61	≤-47	137.72095	≤20	See table below
NTNV	3DH5	Ant1	2441	30~1000	95.96	-64.55	≤-54	0.3507	≤4	PASS

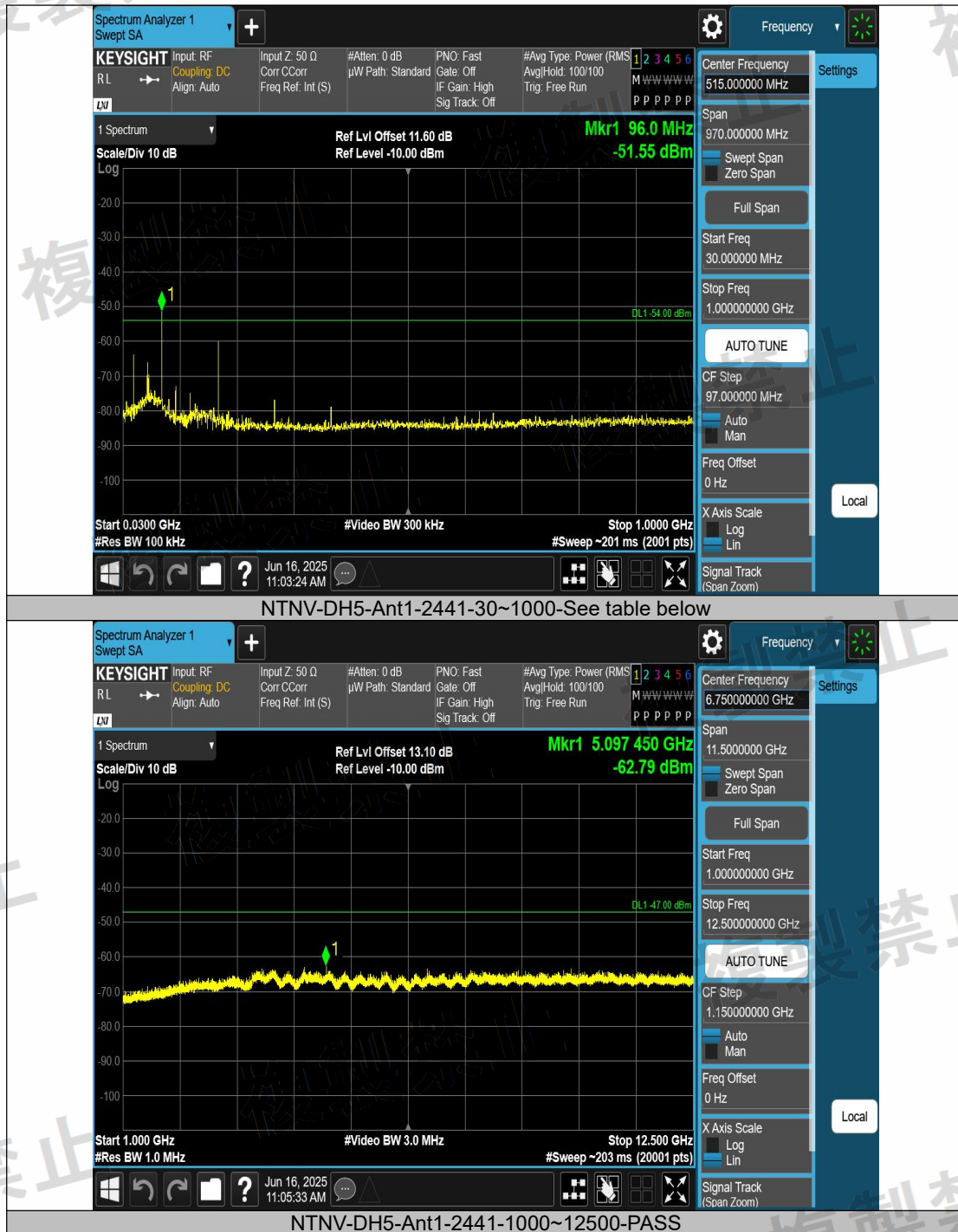
NTNV	3DH5	Ant1	2441	1000~12500	2337.4 5	-44.01	≤-47	39.719 15	≤20	See table below
NTNV	3DH5	Ant1	2480	30~1000	95.96	-64.75	≤-54	0.3349 7	≤4	PASS
NTNV	3DH5	Ant1	2480	1000~12500	2439.2 3	-39.09	≤-47	123.31 048	≤20	See table below
NTNV	3DH5	Ant1	Hop	30~1000	95.96	-76.29	≤-54	0.0235 0	≤4	PASS
NTNV	3DH5	Ant1	Hop	1000~12500	2436.3 5	-61.65	≤-47	0.6839 1	≤20	PASS

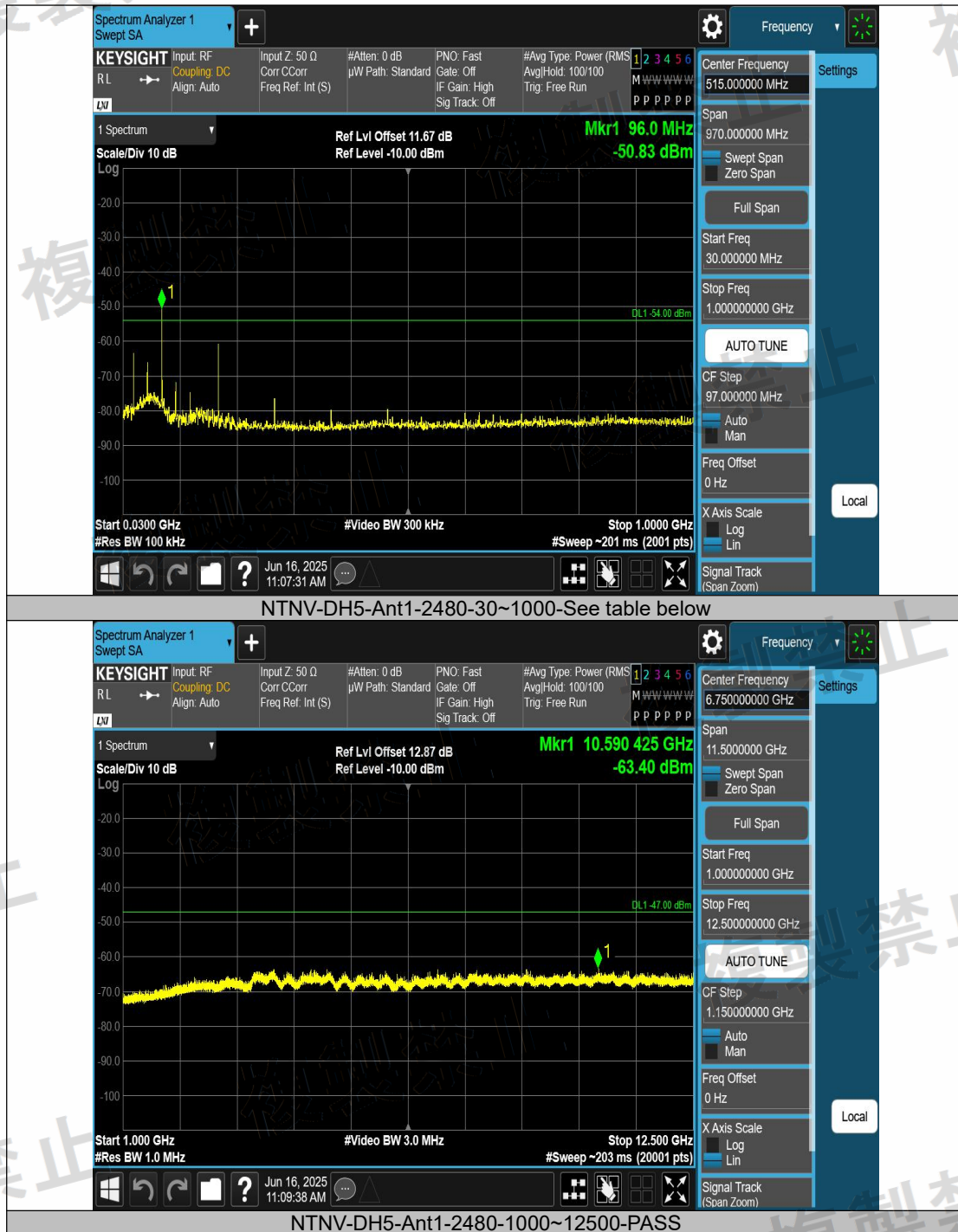
Test Result Step2

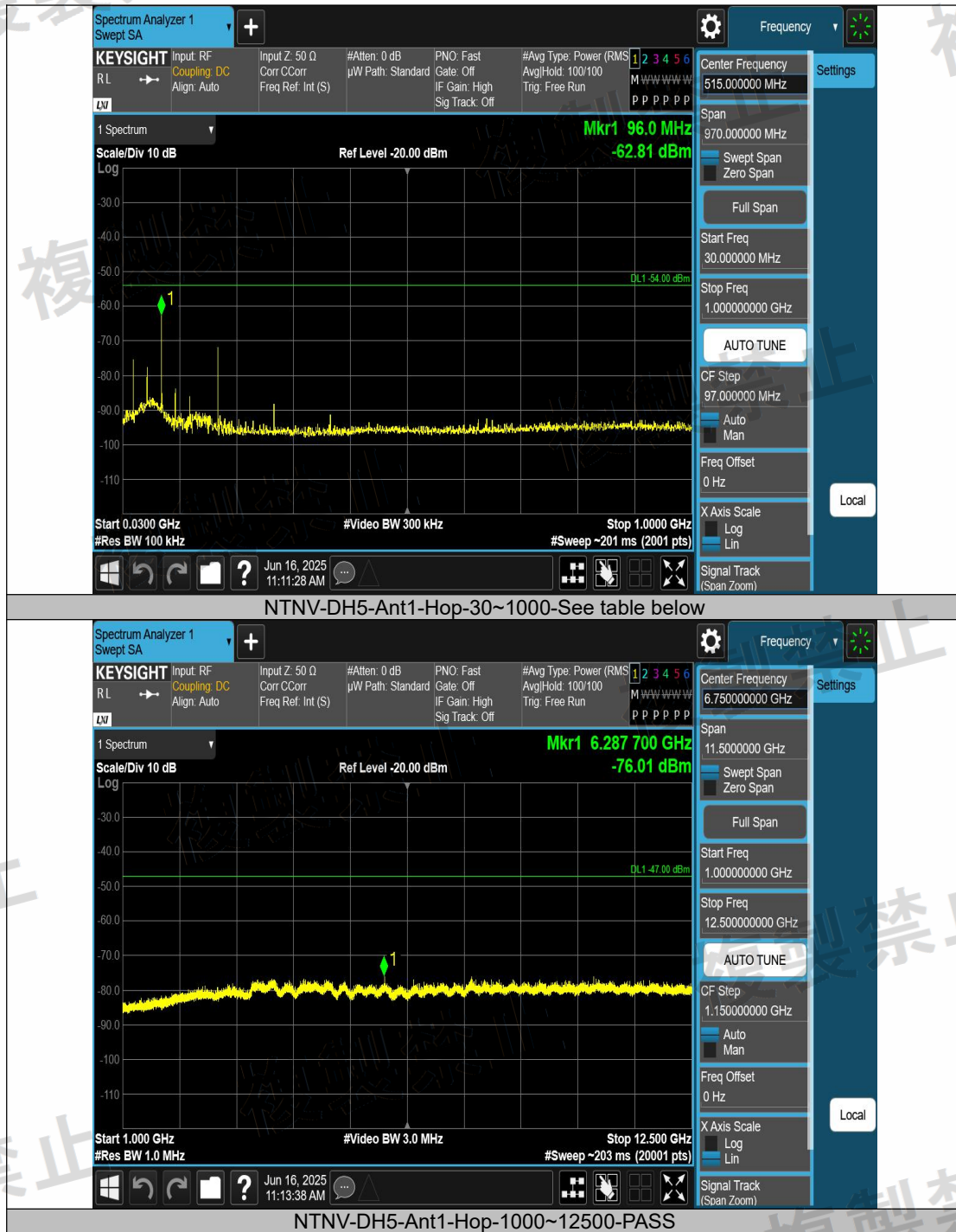
Test Condition	Test Mode	Antenna	Frequen cy[MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	Ant1	2402	95.96	-92.40	≤-54	0.0005 8	≤4	PASS
NTNV	DH5	Ant1	2441	95.96	-92.66	≤-54	0.0005 4	≤4	PASS
NTNV	DH5	Ant1	2480	95.96	-92.91	≤-54	0.0005 1	≤4	PASS
NTNV	DH5	Ant1	Hop	95.96	-105.74	≤-54	0.0000 3	≤4	PASS
NTNV	2DH5	Ant1	2402	95.96	-92.37	≤-54	0.0005 8	≤4	PASS
NTNV	2DH5	Ant1	2441	47.95	-92.92	≤-54	0.0005 1	≤4	PASS
NTNV	2DH5	Ant1	2441	95.96	-92.79	≤-54	0.0005 3	≤4	PASS
NTNV	2DH5	Ant1	2441	191.99	-92.94	≤-54	0.0005 1	≤4	PASS
NTNV	2DH5	Ant1	2480	1944.73	-80.32	≤-47	0.0092 9	≤20	PASS
NTNV	2DH5	Ant1	2480	2322.50	-79.12	≤-47	0.0122 5	≤20	PASS
NTNV	2DH5	Ant1	2480	2339.18	-79.13	≤-47	0.0122 2	≤20	PASS
NTNV	2DH5	Ant1	2480	2411.63	-78.90	≤-47	0.0128 8	≤20	PASS
NTNV	2DH5	Ant1	2480	2418.53	-78.91	≤-47	0.0128 5	≤20	PASS
NTNV	2DH5	Ant1	2480	2444.98	-78.86	≤-47	0.0130 0	≤20	PASS
NTNV	3DH5	Ant1	2402	1941.28	-79.82	≤-47	0.0104 2	≤20	PASS
NTNV	3DH5	Ant1	2402	1954.50	-79.79	≤-47	0.0105 0	≤20	PASS
NTNV	3DH5	Ant1	2402	2405.88	-78.48	≤-47	0.0141 9	≤20	PASS
NTNV	3DH5	Ant1	2402	2430.03	-78.29	≤-47	0.0148 3	≤20	PASS
NTNV	3DH5	Ant1	2402	2438.65	-78.43	≤-47	0.0143 5	≤20	PASS
NTNV	3DH5	Ant1	2402	2533.53	-78.29	≤-47	0.0148 3	≤20	PASS
NTNV	3DH5	Ant1	2402	2552.50	-78.22	≤-47	0.0150 7	≤20	PASS
NTNV	3DH5	Ant1	2402	2566.30	-78.10	≤-47	0.0154 9	≤20	PASS

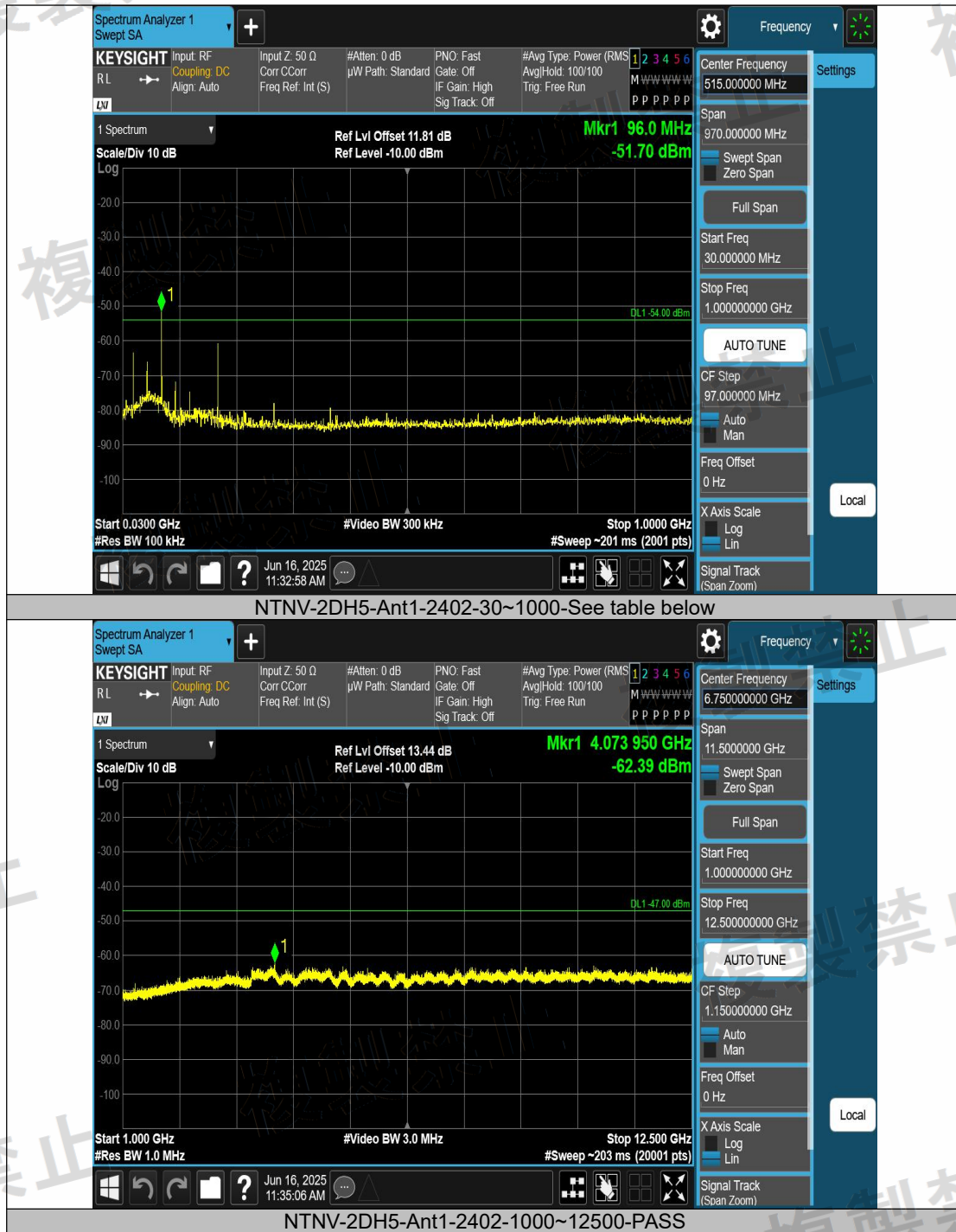
NTNV	3DH5	Ant1	2402	2587.58	-78.07	≤-47	0.0156 0	≤20	PASS
NTNV	3DH5	Ant1	2441	1947.60	-80.12	≤-47	0.0097 3	≤20	PASS
NTNV	3DH5	Ant1	2441	2337.45	-78.83	≤-47	0.0130 9	≤20	PASS
NTNV	3DH5	Ant1	2441	2401.85	-78.71	≤-47	0.0134 6	≤20	PASS
NTNV	3DH5	Ant1	2441	2419.10	-78.77	≤-47	0.0132 7	≤20	PASS
NTNV	3DH5	Ant1	2441	2434.63	-78.74	≤-47	0.0133 7	≤20	PASS
NTNV	3DH5	Ant1	2441	2480.05	-78.67	≤-47	0.0135 8	≤20	PASS
NTNV	3DH5	Ant1	2480	1953.93	-80.43	≤-47	0.0090 6	≤20	PASS
NTNV	3DH5	Ant1	2480	2405.88	-78.99	≤-47	0.0126 2	≤20	PASS
NTNV	3DH5	Ant1	2480	2415.08	-78.89	≤-47	0.0129 1	≤20	PASS
NTNV	3DH5	Ant1	2480	2439.23	-78.93	≤-47	0.0127 9	≤20	PASS
NTNV	3DH5	Ant1	2480	2460.50	-78.70	≤-47	0.0134 9	≤20	PASS
NTNV	3DH5	Ant1	2480	2477.18	-78.97	≤-47	0.0126 8	≤20	PASS

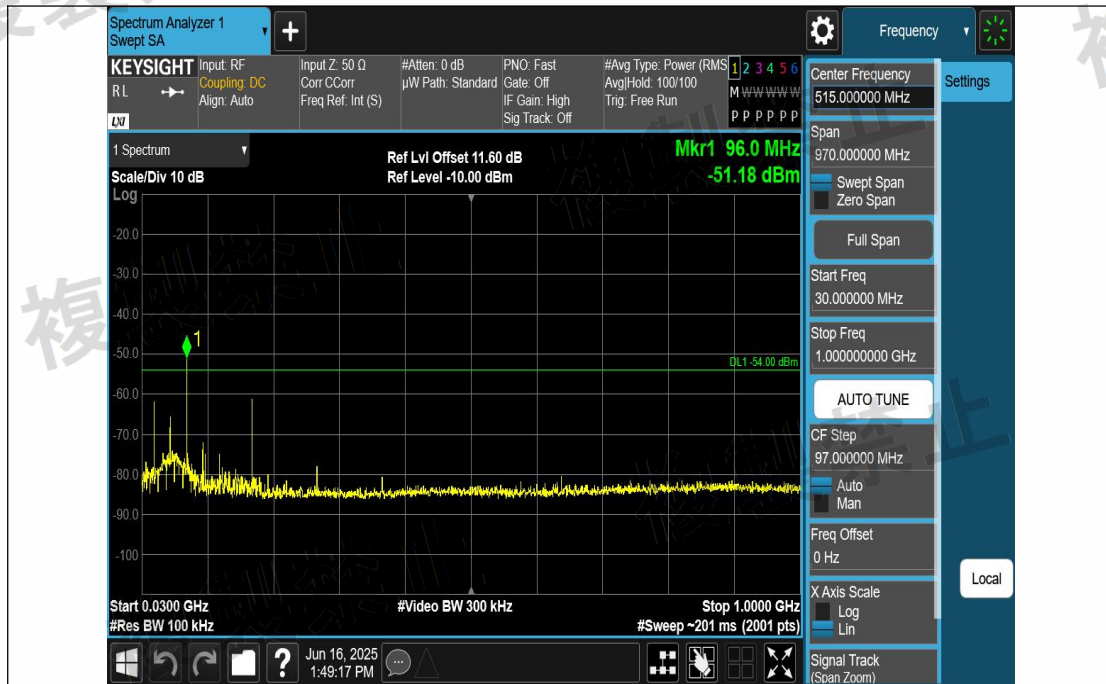




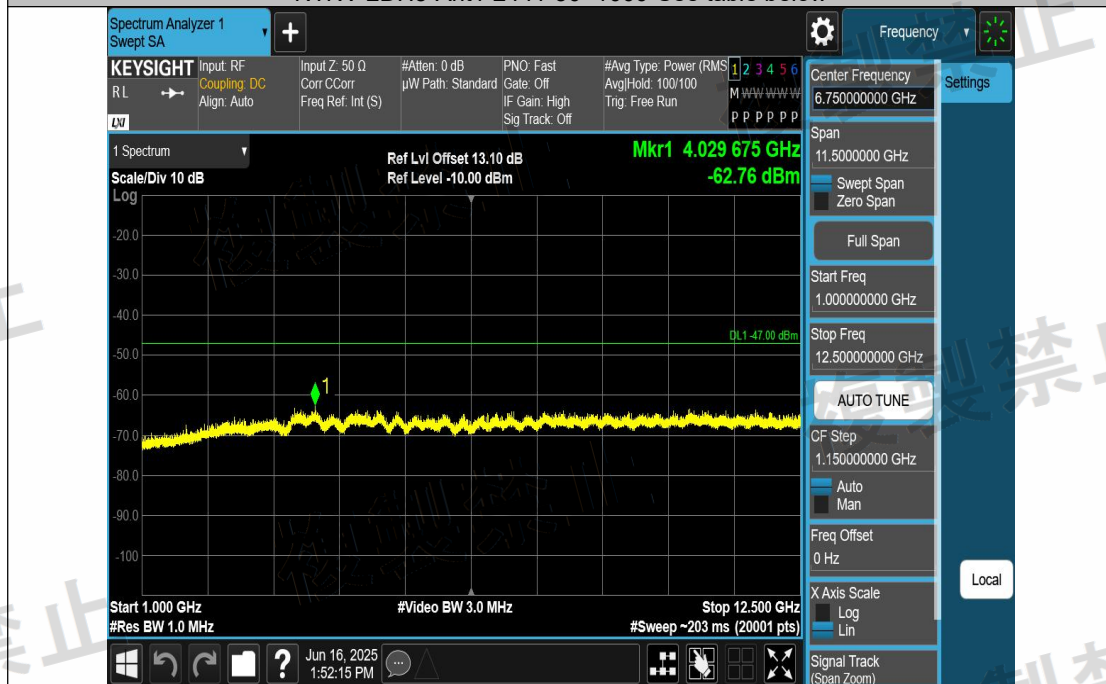








NTNV-2DH5-Ant1-2441-30~1000-See table below



NTNV-2DH5-Ant1-2441-1000~12500-PASS



NTNV-2DH5-Ant1-2480-30~1000-See table below



NTNV-2DH5-Ant1-2480-1000~12500-See table below

